WHAT IS CLAIMED IS:

1.   An application programming interface exposing an AdHocQueryCriteria method to specify a query of data in a relational database in terms of entity properties and fields, the method receiving a plurality of parameters to specify the query, comprising:

an entityAliasList parameter;

a JoinList parameter;

a selectList parameter;

a whereExpression parameter; and

an orderByList parameter.

2.   An application programming interface exposing an operator method to implement arithmetic operations, the method receiving a plurality of parameters to specify the arithmetic operation, comprising:

a left parameter indicating an item to a left of an arithmetic operator;

a right parameter indicating an item to a right of the arithmetic operator; and

the method returning an ArithmeticExpression parameter based on the operator and the left and right parameters.

3.   The application programming interface of claim 2 wherein the left parameter comprises an ArithmeticExpression data type and the right parameter comprises an object data type.

4.   The application programming interface of claim 2 wherein the left parameter and right parameter both comprise ArithmeticExpression data types.

5.   The application programming interface of claim 2 wherein the left parameter comprises an object data type and the right parameter comprises an ArithmeticExpression data type.

6.   An application programming interface exposing an operator method to implement arithmetic operations, the method receiving a plurality of parameters to specify the arithmetic operation, comprising:

   a left parameter indicating an item to a left of
      an arithmetic operator;

   a right parameter indicating an item to a right
      of the arithmetic operator; and

   the   method   returning   a   BooleanExpression
      parameter based on the operator and the
      left and right parameters.

7.   An   application   programming   interface   (API) exposing an AssignmentExpression method to represent an expression to be assigned to a property of an entity, the method receiving an expression parameter to specify the expression to be assigned.

8.   The API of claim 7 wherein the API exposes a GetExpressionEnumerator   method   that   returns   an ExpressionEnumerator parameter.

9. The API of claim 7 wherein the API exposes a GetExpressionContainer method that returns an ExpressionContainer parameter.

10. An application programming interface (API) exposing a CollectionCriteria method to specify a collection query of data in a relational database in terms of entity properties and fields, the method receiving a plurality of parameters to specify the collection query, comprising:

an entityCollectionType parameter;

an entityAliasList parameter;

a JoinList parameter;

a whereExpression parameter; and

an orderByList parameter.

11. An application programming interface (API) exposing an AdHocQueryCriteria method to return an AdHocQueryCriteria parameter based on a plurality of received parameters to specify the AdHocQueryCriteria parameter, comprising:

an entityAliasList parameter; and

a SelectList parameter.

12. The API of claim 11 wherein the received parameters further comprise:

an orderByList parameter.

13. The API of claim 12 wherein the received parameters further comprise:

a joinList parameter.

14. The API of claim 11 wherein the received parameters further comprise:

a whereExpression parameter.

15. The API of claim 14 wherein the received parameters further comprise:

a joinList parameter.

16. The API of claim 15 wherein the received parameters further comprise:

an orderByList parameter.

17. The API of claim 11 wherein the received parameters further comprise:

a joinList parameter.

18. An application programming interface (API) exposing a CollectionCriteria method to return a CollectionCriteria parameter based on a received parameter to specify the CollectionCriteria parameter to return, the received parameter comprising:

an entityAlias parameter.

19. The API of claim 18 wherein the CollectionCriteria method returns the

CollectionCriteria parameter based on a plurality of received parameters comprising:

a whereExpression parameter.

20. The API of claim 18 wherein the CollectionCriteria method returns the CollectionCriteria parameter based on a plurality of received parameters comprising:

an OrderByList parameter.

21. An application programming interface (API) exposing a CollectionCriteria method to return a CollectionCriteria parameter based on at least one received parameter to specify the CollectionCriteria parameter to return, the received parameter comprising:

an entityAlias parameter.

22. The API of claim 21 wherein the at least one received parameter comprises:

an entityCollectionType parameter.

23. The API of claim 22 wherein the at least one received parameter comprises:

an orderByList parameter.

24. The API of claim 23 wherein the at least one received parameter comprises:

a whereExpression parameter.

25. The API of claim 22 wherein the at least one received parameter comprises:

a whereExpression parameter.

26. An application programming interface (API) exposing a CollectionCriteria method to return a CollectionCriteria parameter based on at least one received parameter to specify the CollectionCriteria parameter to return, the received parameter comprising:

an entityAliasList parameter.

27. The API of claim 26 wherein the at least one received parameter comprises:

an entityCollectionType parameter.

28. The API of claim 27 wherein the at least one received parameter comprises:

an orderByList parameter.

29. The API of claim 28 wherein the at least one received parameter comprises:

an joinList parameter.

30. The API of claim 26 wherein the at least one received parameter comprises:

an orderByList parameter.

31. The API of claim 27 wherein the at least one received parameter comprises:

a whereExpression parameter.

32. The API of claim 26 wherein the at least one received parameter comprises:

a whereExpression parameter.

33. The API of claim 28 wherein the at least one received parameter comprises:

a whereExpression parameter.

34. The API of claim 26 wherein the at least one received parameter comprises:

an joinList parameter.

35. The API of claim 34 wherein the at least one received parameter comprises:

a whereExpression parameter.

36. The API of claim 34 wherein the at least one received parameter comprises:

an orderByList parameter.

37. The API of claim 27 wherein the at least one received parameter comprises:

an joinList parameter

38. An application programming interface (API) exposing an EntityAlias method to return an EntityAlias parameter based on at least one received

parameter to specify the EntityAlias parameter to return, the received parameter comprising:

a parentKey parameter; and

an entityType parameter.

39. The API of claim 38 wherein the at least one received parameter comprises:

an alias parameter.

40. The API of claim 38 wherein the at least one received parameter comprises:

an alias parameter.

41. An application programming interface (API) exposing an EntityAliases method to return an EntityAliasList parameter based on at least one received parameter to specify the EntityAliasList parameter to return, the received parameter comprising:

an entityAliases parameter.

42. An application programming interface (API) exposing an EntityCriteria method to return an EntityCriteria parameter based on at least one received parameter to specify the EntityCriteria parameter to return, the received parameter comprising:

an entityKey parameter.

43. An application programming interface (API) exposing an EntityCriteria method to return an EntityCriteria parameter based on at least one received parameter to specify the EntityCriteria parameter to return, the received parameter comprising:

an entityAlias parameter; and

a whereExpression parameter.

44. An application programming interface (API) exposing an EntityCriteria method to return an EntityCriteria parameter based on at least one received parameter to specify the EntityCriteria parameter to return, the received parameter comprising:

an entityAliasList parameter; and

a whereExpression parameter.

45. The API of claim 44 wherein the at least one received parameter comprises:

a joinList parameter.

46. An application programming interface (API) exposing an EntitySetUpdateCriteria method to return an EntitySetUpdateCriteria parameter based on at least one received parameter to specify the EntityCriteria parameter to return, the received parameter comprising:

an entityAliasList parameter; and

a propertyAssignmentList.

47. The API of claim 46 wherein the at least one received parameter comprises:

a whereExpression parameter.

48. An application programming interface (API) exposing an InnerJoin method to return a JoinExpression parameter based on at least one received parameter to specify the JoinExpression parameter to return, the received parameter comprising:

a leftEntityAlias parameter;

a rightEntityAlias parameter; and

a boolExpression parameter.

49. An application programming interface (API) exposing a LeftJoin method to return a JoinExpression parameter based on at least one received parameter to specify the JoinExpression parameter to return, the received parameter comprising:

a leftEntityAlias parameter;

a rightEntityAlias parameter; and

a boolExpression parameter.

50. An application programming interface (API) exposing an OrderBy method to return an OrderByList parameter based on at least one received parameter to specify the OrderByList parameter to return, the received parameter comprising:

an arguments parameter.

51. An application programming interface (API) exposing an OrderByExpression method to return an OrderByExpression parameter based on at least one received parameter to specify the OrderByExpression parameter to return, the received parameter comprising:

a property parameter.

52. The API of claim 51 wherein the at least one received parameter further comprises:

a direction parameter.

53. An application programming interface (API) exposing a RightJoin method to return a JoinExpression parameter based on at least one received parameter to specify the JoinExpression parameter to return, the received parameter comprising:

a leftEntityAlias parameter;

a rightEntityAlias parameter; and

a boolExpression parameter.

54. An application programming interface (API) exposing a CriteriaWithOrderBy method to return an entityAliasList parameter based on at least one received parameter to specify the entityAliasList parameter to return, the received parameter comprising:

a joinList parameter;

a whereExpression parameter; and

an orderByList parameter.

55. An application programming interface (API) exposing a JoinExpression method to define a join operation, on entities represented by data in a data store, based on at least one received parameter, the received parameter comprising:

a joinType parameter;

a leftEntityAlias parameter;

a rightEntityAlias parameter; and

a booleanExpression parameter.